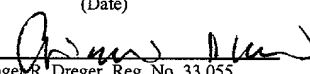


IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| | | | | |
|-----------|---|----------------------|---|-------------------------------------------------------------------------------------|
| Applicant | : | Erickson et al. |) | Group Art Unit Unknown |
| | | |) | |
| Appl. No. | : | Unknown |) | I hereby certify that this correspondence and all |
| | | |) | marked attachments are being deposited with |
| Filed | : | Herewith |) | the United States Postal Service as first-class |
| | | |) | mail in an envelope addressed to: Assistant |
| | | |) | Commissioner for Patents, Washington, D.C. |
| | | |) | 20231, on |
| For | : | METHODS OF TREATMENT |) | March 16, 2001 |
| | | USING ANTI -ErbB |) | (Date) |
| | | ANTIBODY- |) |  |
| | | MAYTANSINOID |) | Ginger R. Dreger, Reg. No. 33,055 |
| | | CONJUGATES |) | |

Examiner : Unknown

SEQUENCE SUBMISSION STATEMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

A copy of the Sequence Listing in computer readable form as required by 37 C.F.R. §1.821(e) is submitted herewith.


As required by 37 C.F.R. §1.82(e), the data on the enclosed disk is identical to the Sequence Listing in the application filed herewith.

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: March 16, 2001

By: 
Ginger R. Dreger
Registration No. 33,055
Attorney of Record
620 Newport Center Drive
Sixteenth Floor
Newport Beach, CA 92660
(415) 954-4114

SEQUENCE LISTING

<110> Sharon Erickson
 Ralph Schwall
 Mark Sliwkowski

<120> METHODS OF TREATMENT USING ANTI-ErbB
 ANTIBODY-MAYTANSINOID CONJUGATES

<130> GENENT.073A2

<150> 60/238,327

<151> 2000-10-05

<150> 09/602,530

<151> 2000-06-23

<160> 11

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 119

<212> PRT

<213> Artificial Sequence

<220>

<223> Humanized Antibody Sequence

<400> 1

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Val | Gln | Leu | Gln | Gln | Ser | Gly | Pro | Glu | Leu | Val | Lys | Pro | Gly | Thr |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Ser | Val | Lys | Ile | Ser | Cys | Lys | Ala | Ser | Gly | Phe | Thr | Phe | Thr | Asp | Tyr |
| | | 20 | | | | | | 25 | | | | | 30 | | |
| Thr | Met | Asp | Trp | Val | Lys | Gln | Ser | His | Gly | Lys | Ser | Leu | Glu | Trp | Ile |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Gly | Asp | Val | Asn | Pro | Asn | Ser | Gly | Gly | Ser | Ile | Tyr | Asn | Gln | Arg | Phe |
| | 50 | | | | | 55 | | | | 60 | | | | | |
| Lys | Gly | Lys | Ala | Ser | Leu | Thr | Val | Asp | Arg | Ser | Ser | Arg | Ile | Val | Tyr |
| 65 | | | | | 70 | | | | 75 | | | | | 80 | |
| Met | Glu | Leu | Arg | Ser | Leu | Thr | Phe | Glu | Asp | Thr | Ala | Val | Tyr | Tyr | Cys |
| | | | 85 | | | | | 90 | | | | | 95 | | |
| Ala | Arg | Asn | Leu | Gly | Pro | Ser | Phe | Tyr | Phe | Asp | Tyr | Trp | Gly | Gln | Gly |
| | | 100 | | | | | | 105 | | | | | 110 | | |
| Thr | Thr | Leu | Thr | Val | Ser | Ser | | | | | | | | | |
| | | 115 | | | | | | | | | | | | | |

<210> 2

<211> 119

<212> PRT

<213> Artificial Sequence

<220>

<223> Humanized Antibody Sequence

<400> 2

```
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1           5           10           15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Thr Asp Tyr
      20           25           30
Thr Met Asp Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
      35           40           45
Ala Asp Val Asn Pro Asn Ser Gly Gly Ser Ile Tyr Asn Gln Arg Phe
      50           55           60
Lys Gly Arg Phe Thr Leu Ser Val Asp Arg Ser Lys Asn Thr Leu Tyr
      65           70           75           80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
      85           90           95
Ala Arg Asn Leu Gly Pro Ser Phe Tyr Phe Asp Tyr Trp Gly Gln Gly
      100           105           110
Thr Leu Val Thr Val Ser Ser
      115
```

<210> 3

<211> 119

<212> PRT

<213> Artificial Sequence

<220>

<223> Humanized Antibody Sequence

<400> 3

```
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
 1           5           10           15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr
      20           25           30
Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
      35           40           45
Ala Val Ile Ser Gly Asp Gly Gly Ser Thr Tyr Tyr Ala Asp Ser Val
      50           55           60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr
      65           70           75           80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
      85           90           95
Ala Arg Gly Arg Val Gly Tyr Ser Leu Tyr Asp Tyr Trp Gly Gln Gly
      100           105           110
Thr Leu Val Thr Val Ser Ser
      115
```

<210> 4

<211> 109

<212> PRT

<213> Artificial Sequence

<220>

<223> Humanized Antibody Sequence

<400> 4

Asp Thr Val Met Thr Gln Ser His Lys Ile Met Ser Thr Ser Val Gly
1 5 10 15
Asp Arg Val Ser Ile Thr Cys Lys Ala Ser Gln Asp Val Ser Ile Gly
20 25 30
Val Ala Trp Tyr Gln Gln Arg Pro Gly Gln Ser Pro Lys Leu Leu Ile
35 40 45
Tyr Ser Ala Ser Tyr Arg Tyr Thr Gly Val Pro Asp Arg Phe Thr Gly
50 55 60
Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile Ser Ser Val Gln Ala
65 70 75 80
Glu Asp Leu Ala Val Tyr Tyr Cys Gln Gln Tyr Tyr Ile Tyr Pro Tyr
85 90 95
Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg Thr
100 105

<210> 5

<211> 109

<212> PRT

<213> Artificial Sequence

<220>

<223> Humanized Antibody Sequence

<400> 5

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15
Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Asp Val Ser Ile Gly
20 25 30
Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45
Tyr Ser Ala Ser Tyr Arg Tyr Thr Gly Val Pro Ser Arg Phe Ser Gly
50 55 60
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80
Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr Tyr Ile Tyr Pro Tyr
85 90 95
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg Thr
100 105

<210> 6

<211> 109

<212> PRT

<213> Artificial Sequence

<220>

<223> Humanized Antibody Sequence

<400> 6

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15

| | | | | | | |
|------------|------------|------------|------------|------------|------------|------|
| ttcgtcttca | agaatactgc | ctcgcgcgtt | tccgtgatga | cggtgaaaac | ctctgacaca | 8880 |
| tgcagctccc | ggagacgggc | acagcttgtc | tgtaagcgga | tgccgggagc | agacaagccc | 8940 |
| gtcagggcgc | gtcagcgggt | gttggcgggt | gtcggggcgc | agccatgacc | cagtcaagta | 9000 |
| gcgatagcgg | agttggctta | actatgcggc | atcagagcag | attgtactga | gagtgcacca | 9060 |
| tatgcggtgt | gaaataccgc | acagatgcgt | aaggagaaaa | taccgcatca | ggcgccattc | 9120 |
| gccattcagg | ctacgcaact | gttgggaagg | gcgatcgggt | cgggcctctt | cgctattacg | 9180 |
| ccagctggcg | aaggggggat | gtgctgcaag | gcgattaagt | tgggtaacgc | caggggtttc | 9240 |
| ccagtcacga | cgttgtaaaa | cgacggccag | tgcc | | | 9274 |

<210> 8

<211> 3768

<212> DNA

<213> Homo sapiens

<400> 8

| | | | | | | |
|-------------|-------------|-------------|-------------|------------|-------------|------|
| atggagctgg | cggcettgtg | ccgctggggg | ctcctcctcg | ccctcttgcc | ccccggagcc | 60 |
| gcgagcacc | aagtgtgcac | cggcacagac | atgaagctgc | ggctccctgc | cagtcccag | 120 |
| acccacctgg | acatgctccg | ccacctctac | cagggctgcc | aggtggtgca | gggaaacctg | 180 |
| gaactcacct | acctgcccac | caatgccagc | ctgtccttcc | tgccagatat | ccaggaggtg | 240 |
| cagggctacg | tgtctatcgc | tcacaaccaa | gtgaggcagg | tcccactgca | gaggctgcgg | 300 |
| attgtgcgag | gcacccagct | ctttgaggac | aactatgccc | tggccgtgct | agacaatgga | 360 |
| gacccgctga | acaataccac | ccctgtcaca | ggggcctccc | caggaggcct | gcgggagctg | 420 |
| cagcttcgaa | gcctcacaga | gatcttgaaa | ggaggggtct | tgatccagcg | gaacccccag | 480 |
| ctctgctaacc | aggacacgat | tttgtggaag | gacatcttcc | acaagaacaa | ccagctggct | 540 |
| ctcacactga | tagacaccaa | ccgtctctcg | gcctgccacc | cctgttctcc | gatgtgtaag | 600 |
| ggctcccgc | gctggggaga | gagttctgag | gattgtcaga | gcctgacgcg | caactgtctgt | 660 |
| gccggtggct | gtgcccgcgt | caagggggcca | ctgcccactg | actgctgcca | tgagcagtg | 720 |
| gctgccggct | gcacggggcc | caagcactct | gactgcctgg | cctgcctcca | cttcaaccac | 780 |
| agtggcatct | gtgagctgca | ctgcccagcc | ctggtcacct | acaacacaga | cacgtttgag | 840 |
| tccatgcccc | atcccgaggg | ccggtataca | ttcgggcgcca | gctgtgtgac | tgccctgtccc | 900 |
| tacaactacc | ttttctacgga | cgtgggatcc | tgcaccctcg | tctgccccct | gcacaaccaa | 960 |
| gaggtgacag | cagaggatgg | aacacagcgg | tgtgagaagt | gcagcaagcc | ctgtgcccga | 1020 |
| gtgtgctatg | gtctgggcat | ggagcacttg | cgagagggtga | gggcagttac | cagtgcgaat | 1080 |
| atccaggagt | ttgctggctg | caagaagatc | tttgggagcc | tggcatttct | gccggagagc | 1140 |
| tttgatgggg | acccagcctc | caacactgcc | ccgctccagc | cagagcagct | ccaagtgttt | 1200 |
| gagactctgg | aagagatcac | aggttacct | tacatctcag | catggccgga | cagcctgcct | 1260 |
| gacctcagcg | tcttcacagaa | cctgcaagta | atccggggac | gaattctgca | caatggcgcc | 1320 |
| tactcgtgta | ccctgcaagg | gctgggcata | agctggctgg | ggctgcgctc | actgagggaa | 1380 |
| ctgggacgtg | gactggccct | catccaccat | aacacccacc | tctgcttctg | gcacacggtg | 1440 |
| ccctgggacc | agctctttcg | gaacccgcac | caagctctgc | tccacactgc | caaccggcca | 1500 |
| gaggacgagt | gtgtgggcga | gggcctggcc | tgccaccagc | tgtgcgccc | agggcactgc | 1560 |
| tgggtccag | ggcccaccca | gtgtgtcaac | tgccagccagt | tccttcgggg | ccaggagtgc | 1620 |
| gtggaggaat | gccgagtact | gcaggggctc | cccagggagt | atgtgaatgc | caggcactgt | 1680 |
| ttgccgtgcc | acctgagtg | tcagccccag | aatggctcag | tgacctgttt | tggaccggag | 1740 |
| gctgaccagt | gtgtggcctg | tgcccactat | aaggaccctc | ccttctgcgt | ggcccgtgct | 1800 |
| cccagcgggtg | tgaaaacctga | cctctcctac | atgcccatct | ggaagtgttc | agatgaggag | 1860 |
| ggcgcatgcc | agccttgccc | catcaactgc | acccactcct | gtgtggacct | ggatgacaag | 1920 |
| ggctgccccg | ccgagcagag | agccagccct | ctgacgtcca | tctgtctctg | ggtggttggc | 1980 |
| attctgctgg | tcgtggtctt | gggggtggtc | tttgggatcc | tcatcaagcg | acggcagcag | 2040 |
| aagatccgga | agtacacgat | gcggagactg | ctgcaggaaa | cggagctggt | ggagccgctg | 2100 |
| acacctagcg | gagcgatgcc | caaccaggcg | cagatgcgga | tcctgaaaga | gacggagctg | 2160 |
| aggaagggtga | aggtgcttgg | atctggcgct | tttggcacag | tctacaaggg | catctggatc | 2220 |
| cctgatgggg | agaatgtgaa | aattccagtg | gocatcaaag | tgttgaggga | aaacacatcc | 2280 |
| cccaaagcca | acaaagaaat | cttagacgaa | gcatacgtga | tggctggtgt | gggctcccca | 2340 |
| tatgtctccc | gccttctggg | catctgcctg | acatccacgg | tgacgctggt | gacacagctt | 2400 |
| atgcctatg | gctgcctctt | agaccatgtc | cgggaaaacc | gcggacgcct | gggctcccag | 2460 |
| gacctgctga | actggtgtat | gcagattgcc | aaggggatga | gctacctgga | ggatgtgcgg | 2520 |

bioRxiv preprint doi: <https://doi.org/10.1101/111111>; this version posted May 1, 2016. The copyright holder for this preprint (which was not certified by peer review) is the author/funder, who has granted bioRxiv a license to display the preprint in perpetuity. It is made available under aCC-BY-NC-ND 4.0 International license.


```

ctcgtacaca gggacttggc cgctcggaac gtgctgggtca agagtcccaa ccatgtcaaa 2580
attacagact tcgggctggc tcggctgctg gacattgacg agacagagta ccatgcagat 2640
gggggcaagg tgcccatcaa gtggatggcg ctggagtcca ttctccgccg gcggttcacc 2700
caccagagtg atgtgtggag ttatgggtgt actgtgtggg agctgatgac ttttggggcc 2760
aaaccttacg atgggatccc agcccgggag atccctgacc tgctggaaaa gggggagcgg 2820
ctgccccagc ccccatctg caccattgat gtctacatga tcatgggtcaa atgttggtg 2880
attgactctg aatgtoggcc aagattccgg gagttgggtg ctgaattctc ccgcatggcc 2940
agggaccccc agcgctttgt ggtcatccag aatgaggact tgggcccagc cagtcccttg 3000
gacagcacct tctaccgctc actgctggag gacgatgaca tgggggacct ggtggatgct 3060
gaggagtatc tggtagccca gcagggttc ttctgtccag accctgcccc gggcgtggg 3120
ggcatggtcc accacaggca ccgcagctca tctaccagga gtggcggtgg ggacctgaca 3180
ctagggtctg agccctctga agaggaggcc ccaggtctc cactggcacc ctccgaaggg 3240
gctggctcgg atgtatttga tggtagcctg ggaatggggg cagccaaggg gctgcaaagc 3300
ctccccacac atgaccccag ccctctacag cggtagagtg aggacccac agtaccctg 3360
ccctctgaga ctgatggcta cgttgcccc ctgacctgca gccccagcc tgaatatgtg 3420
aaccagccag atgttoggcc ccagccccct tcgccccgag agggccctct gcctgctgcc 3480
cgacctgctg gtgccactct ggaaagggcc aagactctct cccagggaa gaatggggtc 3540
gtcaaagacg tttttgcctt tgggggtgcc gtggagaacc ccgagtactt gacaccccag 3600
ggaggagctg cccctcagcc ccacctcct cctgccttca gccagcctt cgacaacctc 3660
tattactggg accaggaccc accagagcgg ggggctccac ccagcacctt caaagggaca 3720
cctacggcag agaaccaga gtacctgggt ctggacgtgc cagtgtga 3768

```

<210> 9

<211> 1255

<212> PRT

<213> Homo sapiens

<400> 9

```

Met Glu Leu Ala Ala Leu Cys Arg Trp Gly Leu Leu Leu Ala Leu Leu
 1          5          10          15
Pro Pro Gly Ala Ala Ser Thr Gln Val Cys Thr Gly Thr Asp Met Lys
 20          25          30
Leu Arg Leu Pro Ala Ser Pro Glu Thr His Leu Asp Met Leu Arg His
 35          40          45
Leu Tyr Gln Gly Cys Gln Val Val Gln Gly Asn Leu Glu Leu Thr Tyr
 50          55          60
Leu Pro Thr Asn Ala Ser Leu Ser Phe Leu Gln Asp Ile Gln Glu Val
 65          70          75          80
Gln Gly Tyr Val Leu Ile Ala His Asn Gln Val Arg Gln Val Pro Leu
 85          90          95
Gln Arg Leu Arg Ile Val Arg Gly Thr Gln Leu Phe Glu Asp Asn Tyr
100          105          110
Ala Leu Ala Val Leu Asp Asn Gly Asp Pro Leu Asn Asn Thr Thr Pro
115          120          125
Val Thr Gly Ala Ser Pro Gly Gly Leu Arg Glu Leu Gln Leu Arg Ser
130          135          140
Leu Thr Glu Ile Leu Lys Gly Gly Val Leu Ile Gln Arg Asn Pro Gln
145          150          155          160
Leu Cys Tyr Gln Asp Thr Ile Leu Trp Lys Asp Ile Phe His Lys Asn
165          170          175
Asn Gln Leu Ala Leu Thr Leu Ile Asp Thr Asn Arg Ser Arg Ala Cys
180          185          190
His Pro Cys Ser Pro Met Cys Lys Gly Ser Arg Cys Trp Gly Glu Ser
195          200          205
Ser Glu Asp Cys Gln Ser Leu Thr Arg Thr Val Cys Ala Gly Gly Cys
210          215          220
Ala Arg Cys Lys Gly Pro Leu Pro Thr Asp Cys Cys His Glu Gln Cys

```

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 225 | | 230 | | 235 | | 240 | | | | | | | | | |
| Ala | Ala | Gly | Cys | Thr | Gly | Pro | Lys | His | Ser | Asp | Cys | Leu | Ala | Cys | Leu |
| | | 245 | | | | | | | 250 | | | | | 255 | |
| His | Phe | Asn | His | Ser | Gly | Ile | Cys | Glu | Leu | His | Cys | Pro | Ala | Leu | Val |
| | | 260 | | | | | | 265 | | | | | 270 | | |
| Thr | Tyr | Asn | Thr | Asp | Thr | Phe | Glu | Ser | Met | Pro | Asn | Pro | Glu | Gly | Arg |
| | | 275 | | | | | 280 | | | | | 285 | | | |
| Tyr | Thr | Phe | Gly | Ala | Ser | Cys | Val | Thr | Ala | Cys | Pro | Tyr | Asn | Tyr | Leu |
| | | 290 | | | | 295 | | | | | 300 | | | | |
| Ser | Thr | Asp | Val | Gly | Ser | Cys | Thr | Leu | Val | Cys | Pro | Leu | His | Asn | Gln |
| 305 | | | | 310 | | | | | | 315 | | | | 320 | |
| Glu | Val | Thr | Ala | Glu | Asp | Gly | Thr | Gln | Arg | Cys | Glu | Lys | Cys | Ser | Lys |
| | | 325 | | | | | | 330 | | | | | | 335 | |
| Pro | Cys | Ala | Arg | Val | Cys | Tyr | Gly | Leu | Gly | Met | Glu | His | Leu | Arg | Glu |
| | | 340 | | | | | | 345 | | | | | 350 | | |
| Val | Arg | Ala | Val | Thr | Ser | Ala | Asn | Ile | Gln | Glu | Phe | Ala | Gly | Cys | Lys |
| | | 355 | | | | | 360 | | | | | 365 | | | |
| Lys | Ile | Phe | Gly | Ser | Leu | Ala | Phe | Leu | Pro | Glu | Ser | Phe | Asp | Gly | Asp |
| | 370 | | | 375 | | | | | | | 380 | | | | |
| Pro | Ala | Ser | Asn | Thr | Ala | Pro | Leu | Gln | Pro | Glu | Gln | Leu | Gln | Val | Phe |
| 385 | | | | 390 | | | | | | 395 | | | | 400 | |
| Glu | Thr | Leu | Glu | Glu | Ile | Thr | Gly | Tyr | Leu | Tyr | Ile | Ser | Ala | Trp | Pro |
| | | 405 | | | | | | 410 | | | | | | 415 | |
| Asp | Ser | Leu | Pro | Asp | Leu | Ser | Val | Phe | Gln | Asn | Leu | Gln | Val | Ile | Arg |
| | | 420 | | | | | | 425 | | | | | 430 | | |
| Gly | Arg | Ile | Leu | His | Asn | Gly | Ala | Tyr | Ser | Leu | Thr | Leu | Gln | Gly | Leu |
| | | 435 | | | | 440 | | | | | | 445 | | | |
| Gly | Ile | Ser | Trp | Leu | Gly | Leu | Arg | Ser | Leu | Arg | Glu | Leu | Gly | Ser | Gly |
| | 450 | | | 455 | | | | | | 460 | | | | | |
| Leu | Ala | Leu | Ile | His | His | Asn | Thr | His | Leu | Cys | Phe | Val | His | Thr | Val |
| 465 | | | | 470 | | | | | | 475 | | | | 480 | |
| Pro | Trp | Asp | Gln | Leu | Phe | Arg | Asn | Pro | His | Gln | Ala | Leu | Leu | His | Thr |
| | | 485 | | | | | | 490 | | | | | | 495 | |
| Ala | Asn | Arg | Pro | Glu | Asp | Glu | Cys | Val | Gly | Glu | Gly | Leu | Ala | Cys | His |
| | | 500 | | | | | | 505 | | | | | 510 | | |
| Gln | Leu | Cys | Ala | Arg | Gly | His | Cys | Trp | Gly | Pro | Gly | Pro | Thr | Gln | Cys |
| | 515 | | | | | 520 | | | | | | 525 | | | |
| Val | Asn | Cys | Ser | Gln | Phe | Leu | Arg | Gly | Gln | Glu | Cys | Val | Glu | Glu | Cys |
| | 530 | | | | | 535 | | | | | 540 | | | | |
| Arg | Val | Leu | Gln | Gly | Leu | Pro | Arg | Glu | Tyr | Val | Asn | Ala | Arg | His | Cys |
| 545 | | | | 550 | | | | | | 555 | | | | 560 | |
| Leu | Pro | Cys | His | Pro | Glu | Cys | Gln | Pro | Gln | Asn | Gly | Ser | Val | Thr | Cys |
| | | 565 | | | | | | 570 | | | | | | 575 | |
| Phe | Gly | Pro | Glu | Ala | Asp | Gln | Cys | Val | Ala | Cys | Ala | His | Tyr | Lys | Asp |
| | | 580 | | | | | | 585 | | | | | 590 | | |
| Pro | Pro | Phe | Cys | Val | Ala | Arg | Cys | Pro | Ser | Gly | Val | Lys | Pro | Asp | Leu |
| | | 595 | | | | 600 | | | | | | 605 | | | |
| Ser | Tyr | Met | Pro | Ile | Trp | Lys | Phe | Pro | Asp | Glu | Glu | Gly | Ala | Cys | Gln |
| | 610 | | | | | 615 | | | | | | 620 | | | |
| Pro | Cys | Pro | Ile | Asn | Cys | Thr | His | Ser | Cys | Val | Asp | Leu | Asp | Asp | Lys |
| 625 | | | | 630 | | | | | | 635 | | | | 640 | |
| Gly | Cys | Pro | Ala | Glu | Gln | Arg | Ala | Ser | Pro | Leu | Thr | Ser | Ile | Val | Ser |
| | | 645 | | | | | | 650 | | | | | | 655 | |
| Ala | Val | Val | Gly | Ile | Leu | Leu | Val | Val | Val | Leu | Gly | Val | Val | Phe | Gly |
| | | 660 | | | | | | 665 | | | | | 670 | | |
| Ile | Leu | Ile | Lys | Arg | Arg | Gln | Gln | Lys | Ile | Arg | Lys | Tyr | Thr | Met | Arg |
| | 675 | | | | | 680 | | | | | | 685 | | | |

225 230 235 240
 Ala Ala Gly Cys Thr Gly Pro Lys His Ser Asp Cys Leu Ala Cys Leu
 245 250 255
 His Phe Asn His Ser Gly Ile Cys Glu Leu His Cys Pro Ala Leu Val
 260 265 270
 Thr Tyr Asn Thr Asp Thr Phe Glu Ser Met Pro Asn Pro Glu Gly Arg
 275 280 285
 Tyr Thr Phe Gly Ala Ser Cys Val Thr Ala Cys Pro Tyr Asn Tyr Leu
 290 295 300
 Ser Thr Asp Val Gly Ser Cys Thr Leu Val Cys Pro Leu His Asn Gln
 305 310 315 320
 Glu Val Thr Ala Glu Asp Gly Thr Gln Arg Cys Glu Lys Cys Ser Lys
 325 330 335
 Pro Cys Ala Arg Val Cys Tyr Gly Leu Gly Met Glu His Leu Arg Glu
 340 345 350
 Val Arg Ala Val Thr Ser Ala Asn Ile Gln Glu Phe Ala Gly Cys Lys
 355 360 365
 Lys Ile Phe Gly Ser Leu Ala Phe Leu Pro Glu Ser Phe Asp Gly Asp
 370 375 380
 Pro Ala Ser Asn Thr Ala Pro Leu Gln Pro Glu Gln Leu Gln Val Phe
 385 390 395 400
 Glu Thr Leu Glu Glu Ile Thr Gly Tyr Leu Tyr Ile Ser Ala Trp Pro
 405 410 415
 Asp Ser Leu Pro Asp Leu Ser Val Phe Gln Asn Leu Gln Val Ile Arg
 420 425 430
 Gly Arg Ile Leu His Asn Gly Ala Tyr Ser Leu Thr Leu Gln Gly Leu
 435 440 445
 Gly Ile Ser Trp Leu Gly Leu Arg Ser Leu Arg Glu Leu Gly Ser Gly
 450 455 460
 Leu Ala Leu Ile His His Asn Thr His Leu Cys Phe Val His Thr Val
 465 470 475 480
 Pro Trp Asp Gln Leu Phe Arg Asn Pro His Gln Ala Leu Leu His Thr
 485 490 495
 Ala Asn Arg Pro Glu Asp Glu Cys Val Gly Glu Gly Leu Ala Cys His
 500 505 510
 Gln Leu Cys Ala Arg Gly His Cys Trp Gly Pro Gly Pro Thr Gln Cys
 515 520 525
 Val Asn Cys Ser Gln Phe Leu Arg Gly Gln Glu Cys Val Glu Glu Cys
 530 535 540
 Arg Val Leu Gln Gly Leu Pro Arg Glu Tyr Val Asn Ala Arg His Cys
 545 550 555 560
 Leu Pro Cys His Pro Glu Cys Gln Pro Gln Asn Gly Ser Val Thr Cys
 565 570 575
 Phe Gly Pro Glu Ala Asp Gln Cys Val Ala Cys Ala His Tyr Lys Asp
 580 585 590
 Pro Pro Phe Cys Val Ala Arg Cys Pro Ser Gly Val Lys Pro Asp Leu
 595 600 605
 Ser Tyr Met Pro Ile Trp Lys Phe Pro Asp Glu Glu Gly Ala Cys Gln
 610 615 620
 Pro Cys Pro Ile Asn Cys Thr His Ser Cys Val Asp Leu Asp Asp Lys
 625 630 635 640
 Gly Cys Pro Ala Glu Gln Arg Ala Ser Pro Leu Thr Ser Ile Val Ser
 645 650 655
 Ala Val Val Gly Ile Leu Leu Val Val Val Leu Gly Val Val Phe Gly
 660 665 670
 Ile Leu Ile Lys Arg Arg Gln Gln Lys Ile Arg Lys Tyr Thr Met Arg
 675 680 685

| | | | | | | | | | | | | | | | |
|------|------|-----|-----|-----|------|------|-----|-----|-----|------|------|------|-----|-----|------|
| Arg | Leu | Leu | Gln | Glu | Thr | Glu | Leu | Val | Glu | Pro | Leu | Thr | Pro | Ser | Gly |
| 690 | | | | | | 695 | | | | | 700 | | | | |
| Ala | Met | Pro | Asn | Gln | Ala | Gln | Met | Arg | Ile | Leu | Lys | Glu | Thr | Glu | Leu |
| 705 | | | | | 710 | | | | | 715 | | | | | 720 |
| Arg | Lys | Val | Lys | Val | Leu | Gly | Ser | Gly | Ala | Phe | Gly | Thr | Val | Tyr | Lys |
| | | | | 725 | | | | | 730 | | | | | 735 | |
| Gly | Ile | Trp | Ile | Pro | Asp | Gly | Glu | Asn | Val | Lys | Ile | Pro | Val | Ala | Ile |
| | | | 740 | | | | | 745 | | | | | 750 | | |
| Lys | Val | Leu | Arg | Glu | Asn | Thr | Ser | Pro | Lys | Ala | Asn | Lys | Glu | Ile | Leu |
| | | 755 | | | | | 760 | | | | | 765 | | | |
| Asp | Glu | Ala | Tyr | Val | Met | Ala | Gly | Val | Gly | Ser | Pro | Tyr | Val | Ser | Arg |
| | 770 | | | | | 775 | | | | | 780 | | | | |
| Leu | Leu | Gly | Ile | Cys | Leu | Thr | Ser | Thr | Val | Gln | Leu | Val | Thr | Gln | Leu |
| 785 | | | | | 790 | | | | | 795 | | | | | 800 |
| Met | Pro | Tyr | Gly | Cys | Leu | Leu | Asp | His | Val | Arg | Glu | Asn | Arg | Gly | Arg |
| | | | | 805 | | | | | 810 | | | | | 815 | |
| Leu | Gly | Ser | Gln | Asp | Leu | Leu | Asn | Trp | Cys | Met | Gln | Ile | Ala | Lys | Gly |
| | | | 820 | | | | | 825 | | | | | 830 | | |
| Met | Ser | Tyr | Leu | Glu | Asp | Val | Arg | Leu | Val | His | Arg | Asp | Leu | Ala | Ala |
| | | 835 | | | | | 840 | | | | | 845 | | | |
| Arg | Asn | Val | Leu | Val | Lys | Ser | Pro | Asn | His | Val | Lys | Ile | Thr | Asp | Phe |
| | 850 | | | | | 855 | | | | | 860 | | | | |
| Gly | Leu | Ala | Arg | Leu | Leu | Asp | Ile | Asp | Glu | Thr | Glu | Tyr | His | Ala | Asp |
| 865 | | | | | 870 | | | | | 875 | | | | | 880 |
| Gly | Gly | Lys | Val | Pro | Ile | Lys | Trp | Met | Ala | Leu | Glu | Ser | Ile | Leu | Arg |
| | | | | 885 | | | | | 890 | | | | | 895 | |
| Arg | Arg | Phe | Thr | His | Gln | Ser | Asp | Val | Trp | Ser | Tyr | Gly | Val | Thr | Val |
| | | | 900 | | | | | 905 | | | | | 910 | | |
| Trp | Glu | Leu | Met | Thr | Phe | Gly | Ala | Lys | Pro | Tyr | Asp | Gly | Ile | Pro | Ala |
| | | 915 | | | | | 920 | | | | | 925 | | | |
| Arg | Glu | Ile | Pro | Asp | Leu | Leu | Glu | Lys | Gly | Glu | Arg | Leu | Pro | Gln | Pro |
| | 930 | | | | | 935 | | | | | 940 | | | | |
| Pro | Ile | Cys | Thr | Ile | Asp | Val | Tyr | Met | Ile | Met | Val | Lys | Cys | Trp | Met |
| 945 | | | | | 950 | | | | | 955 | | | | | 960 |
| Ile | Asp | Ser | Glu | Cys | Arg | Pro | Arg | Phe | Arg | Glu | Leu | Val | Ser | Glu | Phe |
| | | | | 965 | | | | | 970 | | | | | 975 | |
| Ser | Arg | Met | Ala | Arg | Asp | Pro | Gln | Arg | Phe | Val | Val | Ile | Gln | Asn | Glu |
| | | | 980 | | | | | 985 | | | | | 990 | | |
| Asp | Leu | Gly | Pro | Ala | Ser | Pro | Leu | Asp | Ser | Thr | Phe | Tyr | Arg | Ser | Leu |
| | 995 | | | | | 1000 | | | | | | 1005 | | | |
| Leu | Glu | Asp | Asp | Asp | Met | Gly | Asp | Leu | Val | Asp | Ala | Glu | Glu | Tyr | Leu |
| | 1010 | | | | | 1015 | | | | | 1020 | | | | |
| Val | Pro | Gln | Gln | Gly | Phe | Phe | Cys | Pro | Asp | Pro | Ala | Pro | Gly | Ala | Gly |
| 1025 | | | | | 1030 | | | | | 1035 | | | | | 1040 |
| Gly | | | | | | | | | | | | | | | |

[illegible]

| | | |
|-----------------------------------------------------------------|------|------|
| 1140 | 1145 | 1150 |
| Arg Glu Gly Pro Leu Pro Ala Ala Arg Pro Ala Gly Ala Thr Leu Glu | | |
| 1155 | 1160 | 1165 |
| Arg Ala Lys Thr Leu Ser Pro Gly Lys Asn Gly Val Val Lys Asp Val | | |
| 1170 | 1175 | 1180 |
| Phe Ala Phe Gly Gly Ala Val Glu Asn Pro Glu Tyr Leu Thr Pro Gln | | |
| 1185 | 1190 | 1195 |
| Gly Gly Ala Ala Pro Gln Pro His Pro Pro Pro Ala Phe Ser Pro Ala | | |
| 1205 | 1210 | 1215 |
| Phe Asp Asn Leu Tyr Tyr Trp Asp Gln Asp Pro Pro Glu Arg Gly Ala | | |
| 1220 | 1225 | 1230 |
| Pro Pro Ser Thr Phe Lys Gly Thr Pro Thr Ala Glu Asn Pro Glu Tyr | | |
| 1235 | 1240 | 1245 |
| Leu Gly Leu Asp Val Pro Val | | |
| 1250 | 1255 | |

<210> 10
 <211> 9274
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Vector Sequence

<400> 10

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|------------|------|
| ttcgaagctag | ccacgtgtaa | ttaagtacta | gcgctcgatc | gtcgaacgta | cggacgtcgt | 60 |
| ctttaccaac | ttgagggtc | tcacaggatg | tggatccct | cttcgtcgtt | tccccaacaa | 120 |
| agggtggttc | ctgctgggca | gacgcgtgtt | tgcctactcg | ggtagtctgt | ttctgtataa | 180 |
| gtaagagacg | acgtttgaac | cgtatcgaga | cgaaacgacc | ccgtaacccc | cttcaacgcc | 240 |
| aagcacgagc | gtcccagag | tgggaactga | gaaaattatc | gagaagacac | gttctaattg | 300 |
| tagatttgtt | aagcctcttg | agctggaagg | agaggactcc | gttcctgggtg | tcggttgaag | 360 |
| gagaatgttc | ggcgtagcta | aaacaggaag | tctttatctt | tattcttacg | aacgattttt | 420 |
| aatataaaaa | tggttattct | ggttagggtta | tccatctaatt | aatcaatgat | acaattcttt | 480 |
| acttagtaaat | agaaaaatcat | gataaaaaatg | agtttaagtc | ttcaatcttt | acccttatct | 540 |
| tttatctttc | tctgcgagtt | ggagtttaact | tcttgtccac | gttcctgata | actggtgtcc | 600 |
| ggatcttcat | tttttccctt | ttttctcaca | aaaacagttt | tatcctctgt | ccaccaccgt | 660 |
| tggtcctga | atatccctcg | gaatgtagat | gtctggttgt | ctacggggga | atggtatatg | 720 |
| tccttctata | ctgaatttaa | ccctatccac | ccaatgtcag | ttaccgatat | ttcacaatat | 780 |
| atctagggag | ggaaaagcac | tttctgagcg | gtctcgatct | ggaggaacca | catacaacag | 840 |
| agttcttctt | tttctgctgt | actttgttgt | ccatgtacta | atataaatag | atccttgtcc | 900 |
| ttacgtgaaa | acccctttct | aaaagggtatg | gttcctcccc | tgtcaccgac | ctgattatct | 960 |
| tgtaataaga | cgtttttgaa | taccgtactc | aataataactt | atcggaata | accgggttgg | 1020 |
| aacgccaaag | gttccgaatt | cattcaaaaa | ccaatgtttg | acaagaattt | tgctcctaca | 1080 |
| ctctgttcac | caaaggactg | aaccaaacca | tagttttcaa | gactagactc | gagactcaca | 1140 |
| agataaaagg | atacaagaaa | acottaaata | ggtttagaat | acatttacga | atacatttgg | 1200 |
| ttctatatatt | tctcacgact | aaaaaactca | tttgaacgtt | gtcaggattg | taagtggaga | 1260 |
| acacacaaac | acagacaagc | ggtagggcag | aggcgagcag | tgaataggaa | gtgaaaggtc | 1320 |
| tcccaggggg | gcgtctgggg | cctagcgatc | gagcgcttag | ctattcgaac | gccggcgaat | 1380 |
| tgacgtcttc | aaccagcact | cogtgacccg | tccattcata | gttccaatgt | tctgtccaaa | 1440 |
| ttcctctggt | tatctttgac | cogaacagct | ctgtctcttc | tgagaacgca | aagactatcc | 1500 |
| gtggataacc | agaatgactg | taggtgaaac | ggaaagagag | gtgtccacag | gtgagggtcc | 1560 |
| aagttaatgt | cgagaattcg | cggcggttcg | aactatagct | taaggacgtc | gggcccccta | 1620 |
| ggtgatcacc | taggtttctt | aagtttttgc | aagagctccc | gcgcgcgggc | cgggggtggg | 1680 |
| gagcgtcgtg | gggcgcgggg | cgcgggaggg | tcggcccagg | tcggcctcgg | tacctcgacc | 1740 |
| gccggaacac | ggcgaccccc | gaggaggagc | gggagaacgg | ggggcctcgg | cgctcgtggg | 1800 |

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|------|
| cacggtgaga | cctttcccg | ttctgagaga | ggggtccctt | cttaccacag | cagtttctgc | 5280 |
| aaaaacggaa | acccccacgg | cacctcttgg | ggctcatgaa | ctgtgggggc | cctcctcgac | 5340 |
| ggggagtcgg | ggtgggagga | ggacggaagt | cgggtcggaa | gctgttgag | ataatgaccc | 5400 |
| tggtcctggg | tggtctcgcc | ccccgaggtg | ggctcgtgaa | gtttccctgt | ggatgccgtc | 5460 |
| tcttgggtct | catggaccca | gacctgcaag | gtcacacttg | gtcttccggt | tcaggcgtct | 5520 |
| tcgggactac | acaggagtc | ctcgtccctt | cgcgcggaga | ctcgataagg | tcttcacac | 5580 |
| tcctccgaaa | aaacctccgg | atccgaaaac | gtttttcgaa | tagctatggc | agctgagctc | 5640 |
| tcatgaagat | ctcgccggcg | cccggttagc | ggagactgtc | gttgacagata | ctggaggatt | 5700 |
| tcctggatct | ccttcogtag | gtttgcgact | acccctccga | ccttctaccg | tcgggggcct | 5760 |
| gacctgcta | gaagtctgtc | tggtatgtgt | tcaagctgtg | tttgagtgtg | ttgctactgc | 5820 |
| gtgatgagtt | cttgatgccc | gacgagatga | cgaagtcctt | cctgtacctg | ttccagctct | 5880 |
| gtaaggacgc | gtagcacgtc | acggcgagac | acctcccgtc | gacaccgaag | atcgacgggc | 5940 |
| ccaccgtagg | gacactgggg | aggggtcacg | gagaggaccg | ggaccttcaa | cggtgaggtc | 6000 |
| acgggtggtc | ggaacaggat | tattttaatt | caacgtagta | aaacagactg | atccacagga | 6060 |
| agatattata | atacccccacc | cccccccacc | atacctcggt | ccccgggttc | aaccttctg | 6120 |
| ttggacatcc | cggacgcccc | agataagccc | ttggttcgac | ctcacgtcac | cgtgttagaa | 6180 |
| ccgagtgcag | ttagaggcgg | aggacccaag | ttcgctaaga | ggacggagtc | ggagggctca | 6240 |
| acaaccctaa | ggtccgtacg | tactggtcgg | agtcgattaa | aaacaaaaaa | accatctctg | 6300 |
| cccaaagtgc | gtataaacgg | tccgaccaga | ggttgaggat | tagagtccac | tagatgggtg | 6360 |
| gaaccggagg | gtttaacgac | cctaattgtc | gcacttgggtg | acgagggaag | ggacaggaag | 6420 |
| actaaaattt | tattgatattg | gtcgtcctcc | tgcaggtctg | tgctgtatcc | gatggacggg | 6480 |
| accgggttgg | ccaccctgta | aactcaacga | acgaaccgtg | acaggagagt | acgcaacca | 6540 |
| ggtgagtcac | ctacggacaa | cttaattgcta | gccacgtgta | attaagtact | ttaagcatta | 6600 |
| gtaccagtat | cgacaaagga | cacactttaa | caataggcga | gtgttaaggt | gtgttgatg | 6660 |
| ctcggccttc | gtattttcaca | tttcggaccc | caocgattac | tcactccatt | gagtgttaatt | 6720 |
| aacgcaacgc | gagtgacggg | cgaagggcca | gccccttggga | cagcacggtc | gacctaatga | 6780 |
| cttagccggt | tgcgcgcccc | tctccgcccc | acgcataacc | cgcgagaagg | cgaaggagcg | 6840 |
| agtgcactgag | cgacgcgagc | cagcaagccg | acgcgcgtcg | ccatagtcga | gtgagtttcc | 6900 |
| gccattatgc | caataggtgt | cttagtcccc | tattgcgtcc | tttcttgtac | actcgttttc | 6960 |
| cggtcgtttt | ccggtccttg | gcatttttcc | ggcgcaacga | ccgcaaaaag | gtatccgagg | 7020 |
| cggggggact | gctcgtagtg | tttttagctg | cgagttcagt | ctccaccgct | ttgggctgtc | 7080 |
| ctgatatttc | tatggtccgc | aaagggggac | cttcgagggga | gcacgcgaga | ggacaaggct | 7140 |
| gggacggcga | atggcctatg | gacaggcgga | aagaggggaag | cccttcgcac | cgcgaaagag | 7200 |
| ttacgagtgc | gacatccata | gagtcgaagc | acatccagca | agcgagggtc | gacccgacac | 7260 |
| acgtgcttgg | ggggcaagtc | gggctggcga | cgcggaatag | gccattgata | gcagaactca | 7320 |
| ggttgggcca | ttctgtgtctg | aatagcgggtg | accgtcgtcg | gtgaccattg | tcctaatacgt | 7380 |
| ctcgtcccat | acatccgcca | cgatgtctca | agaacttcac | caccggattg | atgccgatgt | 7440 |
| gatcttctctg | tcataaaacca | tagacgcgag | acgaacttcg | tcaatggaag | cctttttctc | 7500 |
| aaccatcgag | aactaggccg | tttgtttggg | ggcgaccatc | gccacaaaaa | aaacaaacgt | 7560 |
| tcgtcgtcta | atgcgcgtct | ttttttccta | gagttcttct | aggaaaactag | aaaagatgcc | 7620 |
| ccagactgcg | agtcaccttg | cttttgagtg | caattcccta | aaaccagtag | tctaatagtt | 7680 |
| tttctagaaa | gtggatctag | gaaaatttaa | tttttacttc | aaaatttagt | tagatttcat | 7740 |
| atatactcat | ttgaaccaga | ctgtcaaatg | ttacgaatta | gtcactccgt | ggatagagtc | 7800 |
| gctagacaga | taaagcaagt | aggtatcaac | ggactgaggg | gcagcacatc | tattgatgct | 7860 |
| atgccctccc | gaatggtaga | cgggggtcac | gcagttacta | tggcgctctg | ggtgcgagtg | 7920 |
| gccgaggtct | aaatagtcgt | tatttgggtg | gtcggccttc | ccggctcgcg | tcttcaccag | 7980 |
| gacgttgaaa | taggcggagg | taggtcagat | aattaacaa | ggcccttcga | tctcattcat | 8040 |
| caagcgggtca | attatcaaac | gcgttgcaac | aacggtaacg | acgaccgtag | caccacagtg | 8100 |
| cgagcagcaa | accataccga | agtaagtoga | ggccaagggt | tgctagtctc | gctcaatgta | 8160 |
| ctagggggta | caacacgttt | tttcgccaat | cgaggaagcc | aggaggctag | caacagttct | 8220 |
| cattcaaccg | gcgtcacaa | agtgcgtacc | aataccgtcg | tgacgtatta | agagaatgac | 8280 |
| agtacggtag | gcattctacg | aaaagacact | gaccactcat | gagttgggtc | agtaagactc | 8340 |
| ttatcacata | cgcgcgtggc | tcaacgagaa | cgggcgcgag | tagtgcccta | ttatggcgcg | 8400 |
| gtgtatcgtc | ttgaaatttt | cacgagtagt | aaccttttgc | aagaagcccc | gcttttgaga | 8460 |
| gttcttagaa | tggcgacaac | tctaggtcaa | gctacattgg | gtgagcacgt | gggttgacta | 8520 |
| gaagtcttag | aaaatgaaag | tggtcgcaaa | gacccaactg | tttttgcctc | tccgttttac | 8580 |
| ggcgtttttt | cccttattcc | cgtcgtgcct | ttacaactta | tgagtatgag | aaggaaaaag | 8640 |

```

ttataataac ttcgtaaata gtccaataa cagagtactc gcctatgtat aaacttacat 8700
aaatcttttt atttgtttat cccaaggcg cgtgtaaagg ggcttttcac ggtggactgc 8760
agattctttg gtaataatag tactgtaatt ggatattttt atccgcatag tgctccggga 8820
aagcagaagt tcttatgacg gagcgcgcaa agccactact gccacttttg gagactgtgt 8880
acgtcgaggg cctctgccag tgtcgaacag acattcgcct acggccctcg tctgttcggg 8940
cagtcgcccg cagtcgcccc caaccgcccc cagcccccgcg tcggtactgg gtcagtgcac 9000
cgctatcgcc tcaaccgaat tgatacgccg tagtctcgtc taacatgact ctcacgtggt 9060
atacgccaca ctttatggcg tgtctacgca ttctcttttt atggcgtagt ccgcggtgtaag 9120
cggtgaagtc gatgcgttga caacccttcc cgctagccac gcccgagaa gcgataatgc 9180
ggtcgaccgc ttcccccta cacgacgttc cgctaattca acccattgcg gtcccaaaag 9240
ggtcagtgct gcaacatttt gctgccggtc acgg                                     9274

```

```

<210> 11
<211> 16
<212> PRT
<213> human

```

```

<400> 11
Cys Val Asp Leu Asp Asp Lys Gly Cys Pro Ala Glu Gln Arg Ala Ser
1           5           10           15

```

1
 2
 3
 4
 5
 6
 7
 8
 9
 10
 11
 12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23
 24
 25
 26
 27
 28
 29
 30
 31
 32
 33
 34
 35
 36
 37
 38
 39
 40
 41
 42
 43
 44
 45
 46
 47
 48
 49
 50
 51
 52
 53
 54
 55
 56
 57
 58
 59
 60
 61
 62
 63
 64
 65
 66
 67
 68
 69
 70
 71
 72
 73
 74
 75
 76
 77
 78
 79
 80
 81
 82
 83
 84
 85
 86
 87
 88
 89
 90
 91
 92
 93
 94
 95
 96
 97
 98
 99
 100